

International Workshop

Critical Stability of Few-Body Quantum Systems

October 17 - 22, 2005

SCIENTIFIC COORDINATORS:

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University of Aarhus	Université Joseph Fourier
Aarhus, Denmark	Grenoble, France

ORGANISATION: **Mandy Lochar**, MPIPKS Dresden, Germany

The behavior of physics systems close to limits of stability is often very revealing. Almost all subfields of physics have interesting problems using very similar methods to study few-body problems at the edge of stability. We shall organize an interdisciplinary workshop to discuss examples of common concepts and techniques. The focus of the workshop will be on the properties of weakly bound quantum states and resonances near threshold. The specific emphasis will be influenced by the interests of the participants. The topics within the main theme will include:

- Weakly Coulomb or gravitational-bound few-body states
- Weakly short-range-interaction bound few-body states
- Continuum structure and few-body decay properties
- Dynamical few-body problems near instability
- Correlation in boson-fermion and mixed condensates
- Few-body correlation within many-body systems
- Exotic structures: Efimov, tango, Samba, Borromean, halo states
- Lower-dimensional systems
- Semi-classical methods

INVITED SPEAKERS (* TO BE CONFIRMED):

N. Barnea (Israel)	D. Blume (USA)	M. Brack (Germany)
D. Bressanini (Italy)	J. Briggs (Germany)	J.B. Delos (USA)
C. Desfrancois (France)*	P. Duclos (France)	D.V. Fedorov (Denmark)
E. Garrido (Spain)	T. Frederico (Brazil)	C.H. Greene (USA)
E.J. Heller (USA)	E. Hiyama (Japan)	H. Hogreve (USA/Germany)
T. Komatsuzaki (Japan)	W.-S. Koon (USA)*	R. Littlejohn (USA)
J. Mitroy (Australia)	A. Motovilov (Russia)	M. Olshanii (USA)
F.M. Peeters (Belgium)	J.M. Richard (France)	P. Valiron (France)
K. Varga (USA)	H. Weidenmüller (Germany)	

Applications are welcome and should be made by using the application form on the conference web page. Please note that the number of attendees is limited. The registration fee is €100, costs for accommodation and meals will be covered by the Max Planck Institute. In exceptional cases, limited funding is available to partly cover travel expenses.

Deadline for applications is May 29, 2005.

For further information please contact:

Visitors Program

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